

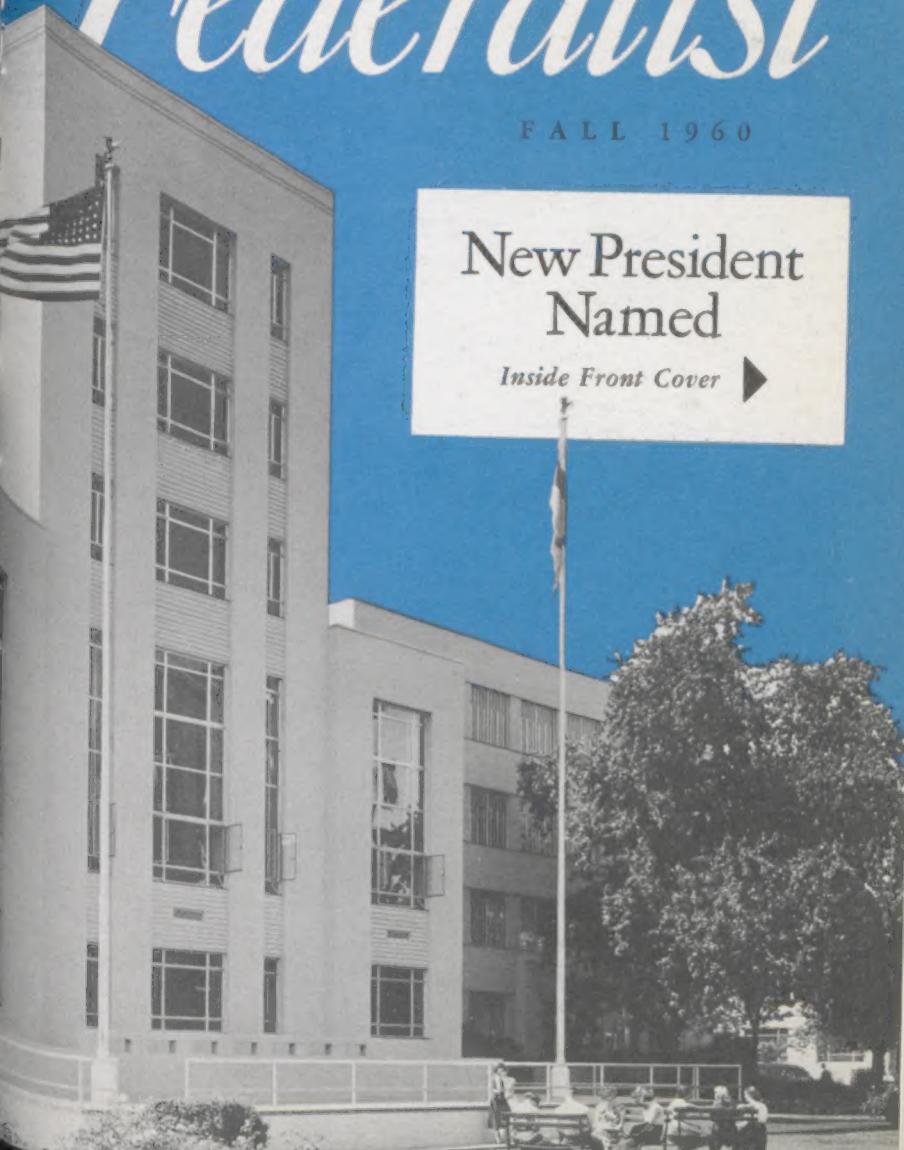
THE GEORGE WASHINGTON UNIVERSITY

Federalist

FALL 1960

New President
Named

Inside Front Cover





Thomas Henry Carroll

UNIVERSITY NAMES NEW PRESIDENT

IN SELECTING THOMAS HENRY CARROLL, Vice President of the Ford Foundation, the Board of Trustees ended an 18-month search for the 13th president of the George Washington University. Carroll, who is 46, will assume his new role in February. Shortly after the announcement of his election, he departed for an important Ford Foundation mission to South America where he will take part in a series of seminars on management, labor problems and economic development.

Acting President Oswald S. Colclough (USN,

Ret.) will return to his post as Dean of Faculties when Carroll assumes office.

The president-elect has built a distinguished career as an educator in economics and business administration. He is a graduate of the University of California at Berkeley, and he holds master's and doctor's degrees from Harvard University, where he served as a member of the faculty and Assistant Dean of the Harvard Business School from the mid-thirties until 1942, when he entered the Navy. During his two-year period of Navy service, he made his home in Arlington, Va.

After the war, he was named Dean and Professor of Business Administration at Syracuse University. In 1950, he became Dean of the School of Business Administration at the University of North Carolina.

Carroll told newsmen that he sees a great future for the University. He envisions a broadening of functions and especially a development of the University's full potential for making significant contributions to solutions of community problems. He feels that the University's location in the heart of the Nation's Capital gives it a unique opportunity to make these contributions. The main function of a university president, he believes, is to give intellectual leadership; this he hopes to do as a "colleague of the faculty." Actually, he will hold the academic rank of Professor of Economic Development and Administration, and he hopes to find time to do some teaching, and perhaps even research, in his chosen field.

EDITOR

Margaret Davis

ASSOCIATE EDITOR

John S. Toomey

CONTRIBUTING EDITORS

Milton Mangum

Department of Agriculture

Celima L. Hazard

Civil Service Commission

Henry Scharer

Commerce Department

William Adam

Department of Defense

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Federal Bureau of Investigation

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DESIGNER

Neil McKnight

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The Role of Central Intelligence

By ALLEN W. DULLES, LLB 26, LLD 59

DIRECTOR OF CENTRAL INTELLIGENCE



THERE IS SOMETHING about intelligence that seems to get into the blood.

My own relationship to intelligence goes back at least 40 years when as a young foreign service officer I became involved in intelligence work during World War I; first in Austria-Hungary before we entered the war, then in Switzerland and later at the Peace Conference of Versailles in 1919.

Then again I came back to intelligence work for about four years in World War II. I shall not soon forget the day back in the spring of 1943 when I secured my first hard evidence of the German development at Peenemunde of its missiles, the V-1 and the V-2. I can truthfully say that my background in missile intelligence goes back about seventeen years. It remains our highest priority.

With the end of World War II, I settled back into the practice of the law. But again I could not resist the lure of the trade and in 1948 I accepted President Truman's invitation to join with two fellow lawyers in preparing, for the National Security Council, a study on the legislation which

had set up the Central Intelligence Agency. I refer to the National Security Act of 1947, which also established the Department of Defense — provided for the unification of the military services — and established the National Security Council.

About ten years ago I went to work at the Central Intelligence Agency for a six week's tour of duty. I have been there ever since.

The years since 1947, when the CIA was organized, have hardly been sufficient to put everything in order. In fact, if in intelligence one ever reaches any such state of complacency, it's about time to have one's head examined. I do feel, however, that real progress has been made over the last dozen years, but intelligence will never be an exact science. It deals not only with the hardware of national power and of battle, but with the vagaries and uncertainties of human beings and human decisions. There are always scores of intangibles and unpredictables, and in fact "unknowables."

Excerpts from an address to the Institute of Aeronautical Sciences on January 26, 1960, in New York City.

'Analysis of human behavior . . . can never be assigned to a computer machine . . . courage is also needed . . . we are diligently seeking and interpreting the facts without fear or favor.'

The best one can do is to see that one's batting average is relatively high, that the predictable and the calculable are stated with the degree of certainty that the evidence permits, and that the best that one can distill out of available facts is brought concisely, objectively and quickly to those who have the responsibility for policy and action.

Courage is also needed. Intelligence officers are all too prone to write their estimates so that no matter what happens they will have covered themselves. With this I have no patience.

In this intelligence task science, technology, electronics and the aeronautical and affiliated sciences play a major role. I regret to state that the days are gone where one could place chief reliance on such tools of collection as the wiles of a Mata Hari. The beats of an electronic signal have come into their own. It takes some of the glamour out of the profession, but these scientific techniques do add an element of more certainty. And in the age of jet propulsion and ballistic missiles, speed and precision of reporting are two of the vital elements of our security.

. . . sometimes . . . I do feel that a good share of the public considers intelligence work as a collateral need rather than a direct and vital element of our national security. History, I think, clearly gives the lie to any such conclusion.

Sometime I should like to find the leisure to write a book on the impact of intelligence successes and failures on the course of history. One might start with the Trojan Horse in 1200 B.C. when no one would listen to Cassandra and with the fatal campaign of the Athenians against Syracuse. Coming down to more modern times, one

could debate the consequences of the miscalculation of the Kaiser in 1914, and of Hitler in World War II, and not overlook our own Pearl Harbors.

* * *

It is not my contention that all of the failures could have turned into successes even if the intelligence had been near perfection and been heeded, and even if the political and military leaders of the past who were interpreting the intelligence had always had the wisdom of Socrates. Neither situation prevailed.

It is my contention, however, that it is possible somewhat to narrow the range of miscalculation by the continual improving of our intelligence, and by perfecting the methods by which we get that intelligence quickly and clearly to those who have the duty of making great decisions. Here we are making real progress.

* * *

The experience of World War II taught us something which countries like the United Kingdom and most of the major European powers had learned well before us, namely, that an effective intelligence system is important to national security.

In reaching this same decision in 1947 we did not attempt, and I believe wisely, to create a unitary system. Rather it is a co-ordinated, integrated system. The Central Intelligence Agency has large responsibilities for coordinating the overall intelligence effort, but does not supplant the work of other agencies.

In the United States Intelligence Board, over which I have the honor to preside, we bring together the intelligence representatives of the Department of State, the Department of Defense, of the Military

Services, and others who have capabilities in the collection field or in the analysis of intelligence. Included on the Board are representatives of the Federal Bureau of Investigation to aid where domestic intelligence matters have international implications, and of the Atomic Energy Commission with its expertise in the nuclear field. Of course we draw upon the great knowledge and experience of private organizations such as those which so many of you represent and we benefit from the wisdom of our scholastic and educational institutions.

The United States Intelligence Board has the responsibility for analyzing all relevant intelligence collected by, or available to, all agencies of government. The resultant product, in the form of coordinated memoranda and estimates, attempts to cover, on a world-wide basis, the developing trends, military, political and economic, which bear upon our national security.

It is our purpose to get our estimates out in *time* to be of use. Post mortems of lost opportunities are valuable to help us improve for the future; they are of little use in developing a policy for the present.

The responsibility for effecting the coordination of intelligence and issuing the resulting product lies with the Central Intelligence Agency.

* * *

The analysis of human behavior, the anticipation of human reactions in a given situation, can never be assigned to a computer machine, and sometimes baffles the cleverest analyst. We have, it is true, drawn up long lists of crises indicators to be checked off in various situations where bellicose or hostile actions are threatened. These lists, based on long experience, are useful but the future is rarely like the past; and we only have some forty years' experience in dealing with International Communism of the Moscow variety and ten years' experience with Communism directed from Peiping.

Today in the Soviet Union more in-

formation is becoming available to the outside world than was the case in the past. This applies particularly to the development of Soviet peacetime economy, their competence in the various peaceful industrial fields, and their problems in trying to apply Marxist theories in agriculture, which has proved to be a costly and unsuccessful undertaking.

In the military area, however, the Soviets attempt, even today, to maintain as strict a veil of secrecy as in the old times of Stalin. As an exception from time to time Mr. Khrushchev himself, as he has done in his own recent "State of the Nation" address, tells us of his plans. Now he proposes to reduce his military manpower to phase over from the bomber to the guided missile, and largely to abandon surface naval vessels and emphasize the submarine. Of course we have to analyze his statements in order to determine what part is hard fact and what part is said to beguile us.

The Kremlin's security is good, but a great deal is known to Intelligence beyond the trickle of military information that is given out officially. In fact, the greater part of what Khrushchev has now told us about this military planning had been anticipated many months ago.

* * *

In viewing problems such as the Soviet strategic attack capabilities with missiles and other weapons, we in the Intelligence Community are keenly aware of the impact which intelligence estimates may have upon our own military posture and our military programming. I can assure you that in preparing them we look to nothing but the available facts, disregarding all outside considerations, political, budgetary or other. At times we have overestimated. At times we have underestimated. But looking back on the last few years with the benefit of hindsight, the record of estimating is creditable. Facts have no politics. We are diligently seeking and interpreting the facts without fear or favor.

The Federal Government and the Cities

Students and faculty sat down together at five luncheon meetings this Spring to consider the subject titling this story.

Senator Joseph S. Clark, Senator from Pennsylvania, summarized somewhat the purpose of these meetings when he told the group that "our traditional concept of Federalism—outmoded in the last century by the nationalization of our economy and in this century by the urbanization of our society—is a case of political lag which urgently deserves our attention."

Senator Clark said that he hoped "university communities such as this one, located here in the Nation's Capital, will assume leadership in re-thinking and reshaping our concepts of Federalism to accord with the realities of modern life."

He called for programs to right a present "distorted" situation which allows America to "boast the biggest level of luxury consumption the world has ever known" and still "be ashamed of our public schools, our public playgrounds, and our public welfare services?"



Dean of the School of Government A. M. Woodruff and Senator Clark.

He leveled complaints at misunderstanding which allows critics to complain of Federal spending, whereas state and local taxes are a hardship to lower income Americans but powerful interests secure favorable business climates by such devices as threatening to move elsewhere.

"The tax issue," he said, "is at heart a class issue."

Other speakers were: Mayor Benjamin West of Nashville, Tenn.; Prof. Roscoe Martin of the Maxwell School of Citizenship and Public Affairs; Prof. Robert Wood of Massachusetts Institute of Technology.

Associate Professor of Political Science Hugh L. LeBlanc, Mayor Ben West of Nashville, and Professor of Public Administration David S. Brown.





In Honor and

Being given time to think on a university campus helped one man do a Government job which has affected the lives of all the world.

The campus was George Washington's, and the man, Edward Teller.

Dr. Teller told *Washington Post* reporter William Chapman about this when he came to the Yard again this June to re-

Dr. Teller (right) exchanges pleasantries with University Trustee Lewis L. Strauss, formerly Chairman of the Atomic Energy Commission.

Citing Dr. Teller, President Colclough said:

It has been said that atoms are letters in which the events of the universe have been written. The reading and understanding of these letters and utilization of the insight thus gained in the development of scientific thought is a task that is challenging the best minds of our day. Few men have brought to that task a more penetrating intellect, a larger concept of duty, or a greater devotion to truth than the man we now honor.

Born in Hungary, he received his early education in schools renowned for their excellence in science. He completed his undergraduate work at the Institute of Technology in Karlsruhe, Germany, and his work for the doctorate in Physics at the University of Leipzig in 1930 at the age of 22. Then followed two years as research associate in the University of Gottingen, a Rockefeller Fellowship at the University of Copenhagen in 1934, and a lectureship at the University of London in 1935. He came to The George Washington University as Professor of Physics in the fall of that year.

Upon the outbreak of World War II he became associated with the Manhattan Project. His research and writing at Los Alamos, at the University of Chicago, and at the University of California have brought him recognition as one of the chief contributors to national welfare and security and as one of the foremost nuclear physicists in the world. The Joseph Priestley Memorial Award in 1957 and the Albert Einstein Award in 1958 add further testimony to his achievements.

In recognition of his preeminence as a scientist, as a scholar, and as a master teacher; of his significant contributions to our knowledge of the structure of matter; and of his world leadership in scientific thought, I confer upon Edward Teller the degree of Doctor of Science, honoris causa, with all of the rights, honors and duties pertaining thereto.

Gratitude

ceive from the University the honorary degree of Doctor of Science.

He said that George Washington had provided six "undisturbed" years with which to think and dream in the realm of nuclear physics.

"I can say in all seriousness that my six years here were the most undisturbed, fruitful years of my life," Teller said. "I worked in my subject and never got into disagreements with anyone."

"It would have remained that way," he said, "except for the regrettable fact that we got into a war."

Dr. Teller came to George Washington in 1935. His arrival was announced by President Emeritus Cloyd H. Marvin, then University President, as "in line with the work in theoretical physics inaugurated by the University last year."

While he was here Dr. Teller taught classes and helped organize and participate in conferences sponsored jointly by the University and the Carnegie Institution of Washington to bring theoretical physicists from all over the world together to think with each other.

Dr. Teller also gave series of illustrated lectures for the public on such subjects as radioactivity of the earth and stars, isotopes, and other problems of nuclear activity. He made his points with such homely devices as an ordinary sieve, a flashlight, and an umbrella. Speaking one time of the wave nature of light, he said Newton would have

made this discovery had he owned an umbrella, adding: "I felt confirmed in this opinion, when on looking the matter up, I discovered that umbrellas were first used ten years after the death of Newton."

When Dr. Teller was brought to the University and, indeed, to the United States by President Marvin to dream and think, the nuclear physicist was known, if at all, to most laymen as someone whose thoughts were literally in the clouds and often a subject for parlor jokes. The perceptiveness and long range point of view of Dr. Teller's lectures at the University in the thirties have been amply substantiated since that time.

During Commencement exercises on June 1, Acting President Oswald S. Colclough reiterated the University's early faith in Dr. Teller, his field of scholarship and his personal capacity, and conferred the University's honorary degree upon him.



Four others received the honorary degree of Doctor of Laws during June Commencement. They were: Jeremiah Milbank, corporation executive, shown above with Chairman Emeritus of the University's Board of Trustees Robert V. Fleming (right); Fred Korth, banker and lawyer, shown in the picture below left with Trustees Joseph D. Hughes (left) and Watson W. Wise (center); and Robert E. Smylie, Governor of Idaho (left) and James P. Coleman, former Governor of Mississippi (right), shown below with President Colclough.





Above, the Ambassador and Mrs. Notowidgo of Indonesia join Dean A. M. Woodruff of the School of Government in congratulating Edward Djanner Sinaga who received the degree of Master of Arts in Government. Mr. Sinaga studied at the University under sponsorship of the Institute of International Education and is now attached to the Embassy of Indonesia in Washington.

Graduation Time

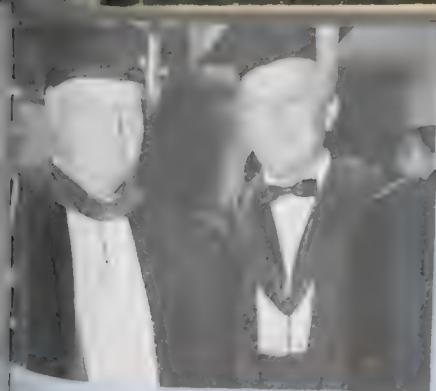
Right, Dean of Columbian College Calvin D. Linton, Irajd Amini, and Mrs. Amini. Mr. Amini is former president of the University's International Students Society and son of a former Ambassador from Iran.



Ladies enter the picture when graduates enrolled in the Division of Air Science receive lieutenants' bars as well as diplomas. From left, Lieut. Frederic R. Strub is

decorated by his wife and his mother, Mrs. Norbert G. Strub; and Lieut. Donald C. Herman by his mother, Mrs. Donald E. Herman, and his wife.





Masters of finance met at Commencement in the persons of Alumnus Vance Brand (right) and Chairman Emeritus of the University's Board of Trustees Robert V. Lemming, who is Chairman of the Board of Riggs National Bank. Mr. Brand, who received the General Alumni Association's Achievement Award, is Managing Director of the Redevelopment Loan Fund.



Coast Guard Lieutenants David Foreman McIntosh (left) and Carlton Eugene Russell receive plaudits from Dean of the University's National Law Center Charles B. Nutting on winning the degree of Juris Doctor, awarded to students who complete studies for the Bachelor of Laws with high scholastic standing and experience in legal authorship.

Traditional "first salute" etiquette required Second Lieutenant Alan J. Goldstein to pass a dollar to Staff Sergeant Allen O. Kavan, R&TC Personnel Clerk, and first to salute the new officer after he was commissioned.

Dean Latimer reviewed the University's June Commencement program with Lt. Lucille Ross Kuhn AB 60, first WAVE to be sent to college by the Navy under its Five Term Program. She later became the first woman to be named Aide to the Governor of Virginia.



Ten Years of **NAVY** **LOGISTICS** **RESEARCH**

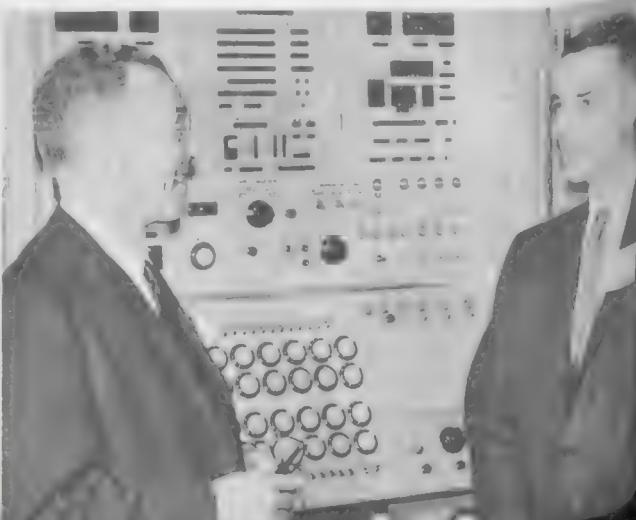
By WILLIAM H. MARLOW PhD

PRINCIPAL INVESTIGATOR, NAVY LOGISTICS RESEARCH PROJECT

ONE of the classic definitions of logistics is indicated by the following quotation. "Strategy and tactics provide the scheme for the conduct of military operations; logistics provides the means thereto." As military operations have become more complex so have their logistics become more demanding and more critical. The idea

for conducting basic research in logistics had its origin during World War II during which time many persons engaged in logistics endeavors were dissatisfied with the working of the systems and methods then current. They concluded that it would be profitable to explore the application of scientific methods and automatic computing

Acting University President Oswald S. Colclough is greeted by Dr. Marlow at a celebration of the 10th anniversary of the Navy Logistics Research Project.



machinery so that not only could waste be reduced but solutions might be obtained for problems which hitherto had not been quantitatively studied. Principal examples of such problems were concerned with analysis of logistics plans in order to determine during early stages in the planning process detailed requirements and other consequences.

The above briefly indicates the background of the Navy Logistics Research Project which is now in its eleventh year of operation at the University. This Project, which occupies Staughton Hall on campus, functions under the leadership of a Principal Investigator and under the general supervision of the Dean for Sponsored Research. It operates under contracts between the University and the Office of Naval Research, where its scientific administration is functionally directed by the Head, Logistics and Mathematical Statistics Branch. Project staff members are drawn from the fields of mathematics, statistics, economics and engineering; in addition, there are included retired naval officers with long and varied experience in logistics matters.

The Project was founded in November 1949 in a University atmosphere in order to take advantage of well established traditions and techniques of successful University research. Furthermore, it was realized that to contribute effectively to the improvement of logistics practices, particularly on a long range basis, the Project should be free from routine administrative duties. While the Project has been set up in this way somewhat outside of the "operating logistics structure" of the Navy, it has avoided working in a vacuum by means of maintaining close liaison with the naval activities which it serves. Indeed, many of the Project studies have been carried out jointly with military personnel.

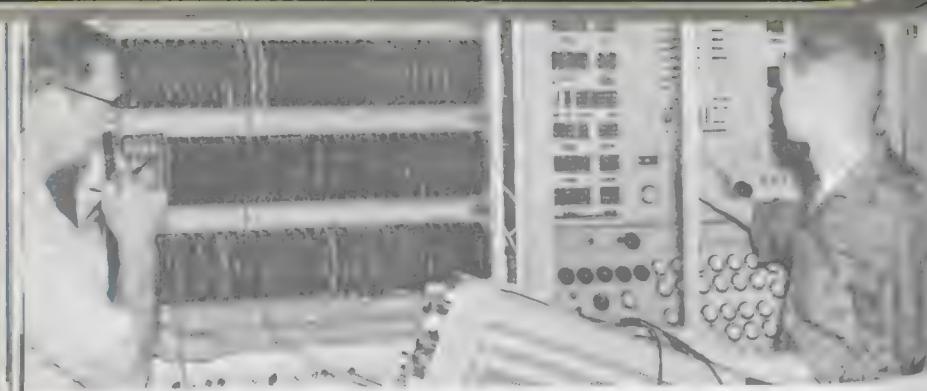
From its beginning the Project has been engaged in research on logistics data processing. Some of the earliest efforts led to the construction of an electronic computer which was an early application of the

concept of tailoring a computer to a specific end use. Certain problems of logistics were analyzed, notably inventory record keeping and scheduling of detailed requirements to support programs of military construction, and these were used to fix the computer specifications. Since delivery in early 1953, the Logistics Computer has been modified and extended in capability to reflect accumulated experience in logistics calculations and the rapidly evolving computer technology. The Logistics Computer as it exists today with its transistorized input-output devices bears little resemblance to the original machine. For a large segment of logistics problems it remains unparalleled in the power of its application.

One of the areas in which the Project has had its greatest success and one in which it has contributed most significantly to problems of serious concern to the military is the area of line item logistics planning. The general problem here consists of devising means for setting "best" stock levels of individual items, "nuts and bolts," to provide for uncertainly known future usages. For example, the "Allowance List Problem" consists of determining the actual list of repair parts to be carried on board

The tabulating machine prints for Gordon J. Morgan, Research Associate, the results of questions asked the computer.





Daily maintenance work is done on the input-output section of the computer by Erwin J. Sobel, engineer in charge of the computer, and William E. Caves, senior technician. This section of the computer translates punch card data into a form usable by the computer and transmits the converted data to the computer, and vice versa.

ship for use by the crew in direct support of installed components. In the case of a conventional submarine there are about 65,000 "pieces" to choose from and there is so little space available for stowage that only a few thousand can be carried. Another difficulty follows from the fact that it is not yet known how to predict future usage sufficiently accurately on the basis of past usage experience alone. That is, the Project has performed extensive analysis of historical usage data which it collected over several years and found that conventional predictive techniques were inapplicable. The only alternative consisted of providing means for introducing military worth measures: relative measures of importance of having available one item rather than another. Studies by the Project based on problems of a conventional submarine have demonstrated that it is possible to distinguish several categories of Military Worth. When these are augmented by data on past usages, it is possible to devise a "best" allowance list in the sense that the available space for stowage is most advantageously utilized by giving priority to "high worth" parts in order to provide maximum independence from any outside support. The results obtained during this research are being used to study more

difficult problems of supply support and they are also being translated into operating practice by the Navy on a broad scale.

For several years the Project has been most active in the area of scheduling ocean-transportation. Basic relationships in transportation have been developed which have a profound influence on minimizing the number of ships that are required to meet specified future delivery schedules. The scheduling techniques devised by the Project yield schedules which satisfy the underlying "war plans" with the smallest possible number of ships. Indeed, attention is given to all phases of the transportation scheduling problem in the sense that at a given point in time, the total number of ships throughout the system are considered, whether loading, in transit to delivery point, unloading, or in transit from delivery. In this work, the Project has worked in close connection with military planners with the result that not only have specific logistics plans been translated into numbers of ships required but also considerable information of a supporting nature has been provided. This supporting information enables better use to be made of available resources and also serves to bolster confidence in the underlying "war plans" themselves.

The first ten years of the Project

THE FEDERALIST

which pretty well coincided with the first ten years of logistics research, were marked by a Decennial Logistics Research Conference at the University in January 1960. This conference was attended by more than 100 representatives of universities, industrial organizations and the military agencies concerned with logistics research. The central theme of this conference was empirical methods in logistics research. Such methods are characterized by the gathering

of pertinent information and data on the logistics problems followed by searches for patterns which are then exploited through numerical models. The Navy Logistics Research Project was able to report many instances of success from use of such techniques as typified by the military worth and transportation studies indicated above which have served to reinforce the wisdom of having a University undertake a long range program of sponsored basic research.

WRITER'S HANDBOOK

A Writer's Handbook for the Development of Educational Materials has been issued by the U.S. Office of Education under the authorship of Barbara Nolen, University lecturer in the College of General Studies, and Dora Goetz, Washington author and specialist in Production of Educational Materials, International Cooperation Administration.

The handbook is an outgrowth of the workshop on educational materials held by the College of General Studies, ICA, and the U.S. Office of Education for visitors from 13 countries.

The 183 page handbook, like the workshop which was described in the 1958 *Federalist*, is concerned with production of textbooks, supplementary books, teachers' manuals, workbooks, periodicals, and pamphlets re-

lated to teaching curriculum.

The authors point out that whereas great literature is usually the result of a single creative mind, many experts—writers, illustrators, teachers, and printers must work together to produce even the simplest textbook.

The handbook concerns itself with the steps in publishing, printing resources, fitting materials to curriculum and materials in various subject fields, readability, illustrations, tryouts and evaluation prior to publication, and the workshop to train new people in textbook preparation. Although it is intended for use in other countries, Miss Nolen says that beginning writers in the field of textbooks for children may find it useful also.

Copies of the "Writer's Handbook," which is Bulletin 1959, No. 19, of the U.S. Department of Health, Education, and Welfare, may be secured for one dollar from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C.



Eileen E. Burgess AB 52, Recreation Supervisor at Metz Service Club, ponders the road to Paris.



Patricia Ann Moore BS 54, Recreation Supervisor in Frankfurt, Germany, checks out prize winners in mufti at the Hitching Post Service Club (Bad Kreuznach).

Girls in Blue.

Work is play and play is work for six recent graduates of the University, who serve in Army Special Services positions overseas.

U. S. Army Photos for The Federalist



Club Director Carolyn A. Miller AB 52 at Regensburg Service Club, Germany.

Army commands employ civilians to develop, organize and direct crafts, library, entertainment, sports and related programs for members of America's military communities at home and overseas. Inquiries about such employment from University alumni and students may be addressed to the University Placement Office.



Three little maids at Duk Soo Palace in Korea are, from left, Rosemary Howard AB 59, Cecilia Ann Campbell AB 59, and Edith M. Fenton AB 59, all serving as recreation leaders.

...in Far Away Places



Tea in the Maroo, summer living room at Korea House.



Shopping

Lending library





MUSEOLOGY

Students studying museology under the University's unusual new program visit museums of the Nation's Capital. Here at the Corcoran with Dr. Henri Dorra, Professorial Lecturer at the University and Assistant Director at Corcoran, they

... inspect a skylight installation ...

observe the restoring of a Rembrandt portrait by Corcoran Restorer Russell J. Quandt ...



... and look at a damaged Rosa Bonheur painting under ultra violet light.



Public Careers Program



First of several hundred to apply for the University's new Public Careers Program was Miss Marie Elaine Hallam of Frederick, Md., who is greeted at the Navy building by Commdr. E. R. W. McCandless. Miss Hallam plans to learn at the University while she earns at the Navy Department Bureau of Ships. Under this program Miss Hallam will alternate with another student semesters of going to school two and three days a week, so that the Navy may have a job filled full time while both students may average 24 semester hours of credit each year. Earn-and-learn public careers appointments are available for qualified students in the Departments of Agriculture, the Navy, State, Federal Communications Commission, and National Bureau of Standards. They include appointments as stenographer, typist, and student trainees in engineering and science. Inquiries about this program may be directed to the Office of Educational Counseling, The George Washington University, Washington 6, D.C.



Student Activities Are Concerned With Major Issues

Which one is the justice? Youthful Associate Justice Potter Stewart of the United States Supreme Court (center) spoke at a professional meeting of Phi Delta Phi, legal fraternity. He was greeted by Students Raymond S. Smethurst, Jr. (left) and Richard S. Harsh.

Copies of *Blackstone's Commentaries* to encourage further excellence were presented winners of the Van Vleck Case Club finals by their judges. From left: Judge Alexander Holtzoff of the U.S. District Court for the District of Columbia; Associate Justice of the U.S. Supreme Court Charles Whittaker; Cecil P. Means and John J. Mullaly; and W. Cameron Burton, Washington attorney.

America needs creative thinkers. Representative Donald J. Irwin of Connecticut discussed this need at a meeting of the Writer's Club, was presented by Club President Thelma Smackey.





Securities and Exchange Commission Silver Anniversary Commemorative

Editors and authors received copies of the University *Law Review's* SEC Anniversary Commemorative Symposium issue. Left to right, Student Editors John L. Fugh, Dennis M. Olsen, Alan D. Hutchinson, Prof. Louis H. Mayo, and the authors: Edward N. Gadsby, SEC Chairman; Manual F. Chen, Commission Adviser; and Andrew D. Erick, Commissioner. Other authors, below, are Philip A. Lewis, Jr., Director of SEC Division of Trading and Exchange shown with Editor-in-Chief Hutchinson; SEC Chief Accountant Andrew Barr; SEC Financial Accountant Liner G. Koch; SEC Attorneys Melvin Katz and Arthur Blasberg, Jr.; SEC Litigator Chester Dattin; former SEC official, Marion V. Freeman; Marc A. White, Counsel, National Association of Securities Dealers, Inc.; Lawrence N. Greene, Assistant Director of the SEC's Division of Corporate Regulation; and Prof. Glen E. Weston, Faculty Editor.



APPOINTMENTS

HELEN R. CAHILL AM 53, Director of the Dietetic Service, Veterans Administration Department of Medicine and Surgery

P. F. DICKENS, JR. AB 36, MD 39, Capt. USMC, Director of Special Weapons Division, Navy Bureau of Medicine and Surgery.

BYRON M. DODGE MD 58, Aviation Medical Examiner, Air Force Ballistics Missile Division, Los Angeles, Calif.

JOHN L. HOLCOMBE LLB 36, Commissioner of the Labor Department's new Bureau of Labor-Management Reports.

EVELYN J. KIRMSE AB 21, AM 29, to the Defense Advisory Committee on Women in the Armed Services.

OREN R. LEWIS LLB 39 (Natl.), Federal judge for the Eastern district of Virginia.

WILLIAM C. MOTT LLB 40, Judge Advocate General of the Navy.

JOHN J. MUCCIO AM 23, Ambassador to Guatemala.

ROGER C. POWERS BS 39, Col. USMC, Command of First Infantry Training Regiment at Camp Lejeune, N. Car.

CHARLES E. RANDALL AM 30, head of Branch of Special Reports, Forest Service, Agriculture.

BART W. REESE AM 47, Personnel Manager, Federal Reserve Bank, Richmond, Va.

CHARLES A. SCHMUTZ LLB 55, Attorney, Office of Chief Counsel, Internal Revenue Service, D. C., and WESLEY A. DIERBERGER JD 38, Los Angeles, Calif.

DUDLEY G. SKINKER LLB 40, United States Marshal for the District of Columbia.

JOSEPH H. TUDOR AB 35, Assistant Solicitor, Division of Public Lands, Interior.

HARRY R. TURKEL EX 34, United States Representative on the Inter-American Economics and Social Council of the Organization of American States with rank of Ambassador. Mr. Turkel is a Director of the Office of Inter-American Regional Economic Affairs.

HONORS

NEWELL A. ATWOOD LLB 41, Commdr. USN, received a letter of commendation from the Secretary of the Navy for outstanding performance of duty as Navy European Contract Research Program Office in London. The award authorizes Commdr. Atwood to wear a bronze star in lieu of his second commendation ribbon.

ARTHUR S. FLEMMING LLB 33, Secretary of Health, Education and Welfare, has been named to the Methodist Hall of Fame in Philanthropy.

GLADYS GALLUP AM in Ed 37, PhD 43, received the Distinguished Service Ruby and citation from Epsilon Sigma Phi, honorary fraternity of 15,000 United States extension workers. D.C. Chapter Chief C. Herman Welch (below), made the presentation.



Federalites

RETIREMENTS

MALCOLM DAVIS AB 45, as Associate Head Keeper, National Zoological Park.

FRED A. GRENFELL DVM 14, as Inspector in Charge of the Pearl River, New York Veterinary Biological Products Inspection Station, Agriculture.

ORA MARSHINO AB 25, AM 32, JD 37, as Program Analyst, Office of the Director, National Cancer Institute.

Health Education and Welfare Superior Service Awards went to KENT F. BRADBURY BS in Eng. 37 and EDWIN YOURMAN LLM 47, Office of the Secretary. FRED HILLIG BS in Chem. 22 received a 40 year service award.

OTHER

TOM KOUZES AB 49, MA 52, has been serving as President of the D.C Chapter of the Armed Forces Management Association. JOHN POLANSKEY, JR. AB 58, Army, is Vice President of Membership.

JULES ROSE AB 42, LLB 49, Washington attorney, addressed the Law Day chapel service at St. Albans School for Boys, and his remarks were inserted in the *Congressional Record* of May 3 by Senator Robert C. Byrd EX 55.

BOURDON F. SCRIBNER BS 33, Chief of Spectrochemistry, National Bureau of Standards, has been appointed to the advisory board of *Analytical Chemistry*, monthly of the American Chemical Society.

JAMES C. STEPHENS, Chief, Division of Training and Utilization, Labor, and Professorial Lecturer in Public Administration, is a joint author with Henry E. and Mary Cushing Niles of "The Office Supervisor," third edition.

Thank You, Mr. President!

The highest honor the Nation can bestow on its career civil servants came to two more University Federalites: Dr. Winfred Overholser, Professor Emeritus of Psychiatry at the University and Superintendent of St. Elizabeths Hospital for "profound and far-reaching contributions in the field of mental health"; and Alumnus Robert M. Page, Director of Research, Naval Research Laboratory, for "remarkable achievements in the field of electronics research, more particularly in the original development of radar." **Last year Alumni** James Bennett, Director of the Bureau of Prisons, and Robert Murphy, then Under Secretary of State, were so honored.



Dr. Overholser came to the Federal service in 1937. In his home State of Massachusetts, he entered the Massachusetts State Hospital Service in 1917 after receiving his B.A. degree (cum laude) at Harvard in 1912 and his M.D. at Boston University in 1916. He served in various posts in the State system, including that of Commissioner of Mental Diseases, before being selected Superintendent of St. Elizabeth's Hospital in 1937. He has taught at Boston University Medical School and at George Washington University School of Medicine since 1938, and has published more than 250 articles in legal and medical journals and several books.



Mr. Page began his federal career in 1927 as a junior physicist with the Naval Research Laboratory following graduation from Hamline University, St. Paul, Minn., that year. He held a succession of positions of increasing responsibility until his appointment as Director of Research at NRL in November 1957. He has received a number of awards and honors, especially for his contributions in development of radar, including the Presidential Certificate of Merit and the Navy's Distinguished Civilian Service Award. He received his M.A. at George Washington in 1932.



At left, Dr. Ionel Rapaport, who conceived the exhibit and collected the paintings and drawings, and Dr. Elizabeth Boggs, President of the National Association for Retarded Children.

Below, Mr. Ephraim Gomberg, Executive Director of the White House Conference on Children and Youth examines a finger painting. Many who attended the Conference visited this exhibit.

RETARDED CHILDREN

Educators and Washington officials shared with University students an exhibition at the University Library on "The Art of the Mentally Retarded." This international exhibition of paintings and drawing was sponsored by the Metropolitan Washington Association for Retarded Children.



Mrs. Willis King, Secretary of the National Association for Retarded Children, chatted with the Danish Ambassador, Count Knuth Winterfeldt.

Below, Mrs. Robert F. Kennedy, and University Librarian and Curator of Art J. Russell Mason. Paintings by Danish children were among those on exhibit.



Craterside Laboratory

Professors and fellow students of Kiguma J. (Jack) Murata have been fascinated with his delving into things which came to pass at Mt. Kilauea.

As scientist in charge of the Geological Survey's Volcano Observatory in Hawaii National Park, K. J. Murata has sent frequent reports based on a complicated observation routine including collecting of samples for chemical and spectrography analysis.

Excerpts from the Geological Survey's information releases tell part of the story.

In October, about a month before the November 14 eruption, the Survey reported that "tiltmeters on Kilauea that record the bulges are sensitive to variations in daytime temperature; thus the need for great precision requires that they be used only during hours of darkness when temperature levels are lower but more stable. Recently the weather has been bad and the nights have been cold, working a hardship on observers who make their rounds of an intricate network of widely dispersed instrument stations night after night."

Mr. Murata's work continues observations which have been made at the Hawaiian Observatory for 37 years. Its current staff includes five full-time scientists, an

Kiguma J. Murata BS 36
(right) is shown at the Hawaiian Volcano Observatory sampling hot gases on the first stage cone in Kilauea Iki.



Volcanism is one of the most important of all research problems. Someday we shall know about it. But it will require the best of intellects for its solution and may indeed hang on a lucky chance discovery.

—ROBERT F. GRIGGS, PH.D.

*Professor Emeritus of Botany, who found the Valley of Ten Thousand Smokes
and contributed much to the present understanding of volcanism*

several scientific aides, part-time workers, and administrative employees. Their duties include maintaining a net of seismograph stations around the Island of Hawaii, and field work on the general geology of volcanoes.

From the rim of Kilauea, evidence of much sub-surface activity showed on instruments during the period September 21 to October 17. Then small shallow earthquakes were recorded at a rate of several hundred a day at a single station. Extra manpower was called into action on the network of kilometer stations, so that bulges and subsidences in the surface could be detected. Continually rising bulges usually are a prelude to an eruption of lava.

By Christmas time, 15 separate phases of eruptions had been recorded by Mr. Murata's crater-side laboratory. Each phase was enhanced by increased earth tremors, fountains of hot gases and pumice, with pahoehoe or "ropy-type" lava flowing out to form deep pools within the crater. Lowering of these pools began as each phase ended. At the end of phase seven the drain-back through the vent was so vigorous as to generate a tremendous whirlpool.

Mr. Murata told of fountains rising to 1,200 feet and jets, after the fountain clears itself, to 1000 feet or more. He estimated at that time that new material erupted amounted to approximately 55 million cubic yards and said it formed a new major topographic feature in the summit region.

Mr. Murata said that in collecting samples of pumice which fell to leeward of the cone, "we wear metal helmets, asbestos gloves, crouch under trees, and dash out to pick up the chunks as they fall all around us."

He reported that at 3:45 a.m., the morning of December 11, a fountain began plastering with molten lava a spot sightseers had been using only a few hours before. Had they been there at that time, "they would have been wiped out completely," Mr. Murata said. He praised the National Park Service for restricting certain areas from tourists who pour into the area from all directions, some flying overhead to obtain a close look.

Pointing out that seismologists on his staff "want desperately to get new information that will give us hints on what in the world is taking place underground," Mr. Murata says the big question is: "Where does the lava go when it disappears back into the vent? There appear to be two possibilities (1) that it drains back into a kind of a magnum chamber where a new charge of gas and hot magma puts it back into an eruptible condition, or (2) it drains down the east rift zone (Chain of Craters) and is permanently lost from the erupting system. We are hoping, too, that the composition of the successively erupted lavas will throw light on this question."

Later normal living patterns for Mr. Murata and his staff were suspended as



Chemical analysis of lava is an important part of studies made by Mr. Murata and his staff at the crater-side laboratory.

Department scientists maintained 24-hour vigils at the sites of eruptions. These provided spectacular sights, and also significant opportunities for scientific observation.

The Geological Survey commented that the long-range objectives of experiments being conducted "are aimed at learning the geochemistry and geophysics of volcanoes with the ultimate expectation that their destructive effects upon human life and property can be lessened by accurate predictions of time and place of forthcoming eruptions."

Other details were described by the Survey as follows:

Jack Murata has said the lone vent perched on the south wall has increased in vigor. Lava temperature (measured with an optical pyrometer) increased from 2030° Fahrenheit to 2160° F.

The lava fountain increased progressively to a height of 1250 feet, until the rising lava pool flooded the vent, damping the jet heights with occasional bursts still reaching 1100 feet. A clearer picture of the tremendous heights attained by these lava fountains can be drawn by comparison with

the Washington Monument, 550 feet high.

Increased heat radiation, strong emission, and smoke from burning trees are making the work of the scientists more and more difficult. However, Kilauea's principal fire pit, lined by vertical walls, Kilauea Iki can be entered without too much difficulty. Confinement of the eruption to within the crater walls thus far has removed any hazards to the surrounding area and buildings.

Two of the scientists have been experimenting with a magnetometer. Making a trial traverse near the vent they gained and reported "interesting variations." Others are manning a network of tiltmeter stations established to keep track of the amount of bulge exhibited by the volcano during periods of rising lava—or the amount of subsidence shown when the lava column is receding.

Seismographs at two stations known as "North Pit" and "Outlet," have been recording a continuous harmonic tremor, the amplitude of which rose appreciably on November 16 just before the increase in height of the lava column from a maximum of 180 feet to more than 700.

Certain tasks like lava collecting and gas sampling are being done on a regular basis. On November 18, Dr. Murata made a quick determination of the percentage of silica (silicon dioxide) in a sample of fresh lava. He found it to be 49.5 percent—which means the magma is "definitely more primitive than anything that came out during the 1955 eruption" (along the rift zone near Puna). The primitive composition correlates with the rising temperatures measured, and indicated to him, that the magma started on its way up from a depth of around 36 miles only a few months ago.

"This is a case of very rapid delivery of undifferentiated material to the surface," he said. "Our group had developed a concept of the effect of speed of ascent and cooling of the magma on the composition of the lavas, and this eruption seems to bear us out."



The Princess and the Queen

University students shared official Washington's delight when Princess Shahnaz of Iran (left) accompanied her husband, the Ambassador from Iran to the Nation's Capital. Here, the Princess and her husband look at a University Queen during International Night festivities on campus where the Ambassador later crowned the Queen. She is Miss Mitra Shashaani, University student and daughter of the Military Air Attaché of the Embassy of Iran.

Phi Beta Kappa



Federalites inaugurated into Phi Beta Kappa this Spring were: Joyce V. Anenson at the Federal Bureau of Investigation; Stanley Heckman, research assistant with

the Navy Logistics Research Project at the University; Joseph Himes, student trainee at the National Bureau of Standards; Mrs. Jacqueline J. Mason, secretary at the Municipal Court of the District of Columbia. In addition Michael W. Dix received a National Science Foundation Graduate Fellowship for studies in biochemistry at Harvard University.



President Eisenhower observes signing by Secretary of State Christian A. Herter and Prime Minister Nobusuke Kishi of the Treaty of Mutual Cooperation and Security between the United States and Japan. Standing, Mr. Bevans, and Miss Nilsen, assist in the signing ceremonies.

The Signing of a **Treaty**

Mr. Charles I. Bevans, Assistant Legal Adviser of the State Department and a former student of The George Washington University, had a prominent role in the signing on January 19 of the Treaty of Mutual Cooperation and security between the United States and Japan, with responsibility for arranging and supervising the ceremony, which was attended by the President and took place in the East Room of the White House.

Two other former students of the University, Mrs. Eleanor C. McDowell and Miss Sylvia E. Nilsen, are among the attorneys serving as advisers on

the Treaty Staff, which is directed by Mr. Bevans.

As head of the Treaty Affairs Staff, Mr. Bevans has responsibility for a variety of functions, of which the supervising of signing ceremonies is only a small part. His staff furnishes legal and technical advice regarding the negotiation, drafting, bringing into force, application, interpretation, and termination of treaties and other agreements, and prepares the final texts for signature. Members of the staff may be designated to serve as technical advisers on treaties to international conferences or to United States delega-

tions to conferences. Mrs. McDowell, Miss Nilsen, and Mr. Bevans served as advisers to conferences considering a number of subjects including whaling, fisheries, fur seals, health, navigation, atomic energy, and Antarctica.

The Treaty Affairs Staff drafts reports from the Secretary of State to the President, recommending the submission of treaties to the Senate for approval, drafts a variety of legal instruments including full powers and ratifications and proclamations of

treties, and maintains records on the status of treaties. The Staff also performs the international depositary functions assigned to the United States under a number of multilateral agreements. Depositary functions include conducting signing ceremonies, receiving instruments by which governments become parties to the agreements, preparing certified copies of agreements, and notifying parties of actions taken, entry into force and termination of agreements.

Faculty Specialist Addresses Cubans

Mrs. Mildred Shott, the University's Executive Officer in Secretarial Studies, is

shown as keynote speaker and lecturer at the annual meeting in Havana of the Federación de Instituciones de Enseñanza Comercial de Cuba. Mrs. Shott spoke on curriculum and human relations in the classroom. She was sent by the Department of State as an American specialist grantee.



Student Bar Association President Dale Carlisle, named the University's Law Student of the Year, Justice Clark, and University Trustee Charles S. Rhyne, originator of the idea of Law Day-USA as a national observance.

The Rule of Law Is Observed Impressively

The University's Student Bar Association heard Associate Justice of the Supreme Court Tom Clark tell how Law Day has grown in three year's time to one of the Nation's most impressive observances.

Among those present to hear him speak at the student's sixth Law Day dinner was University Alumni Trustee Charles S. Rhyne, who three years ago spearheaded the movement which brought the Rule of Law into recognition as Law Day.

At that time Trustee Rhyne wrote about this plan in the *Federalist*.

Readers will be interested to read below some excerpts from Justice Clark's remarks:



"There is no need more pressing in our Capital City than a legal center such as the one you are striving to build.

"It was on the last day of last year that the President of the United States by proclamation urged 'the members of the legal profession to bring the objectives of Law Day to Public attention in all appropriate ways, through religious and educational institutions, by private organizations and public bodies, as well as through the media of public information.' Pursuant to that call, your Student Bar Association arranged this program tonight. This association twice the recipient of the Ameri-

Bar Association award as the Outstanding Student Bar Association of America, recognized in so doing, as President Eisenhower had said, that one of the greatest heritages of American citizenship is a government of law before which all men might stand as equals.

"We are gathered here on this third annual observance of Law Day throughout the nation to reaffirm our faith in the Rule of Laws as well as to demonstrate to the peoples of the earth that America seeks in its relations with nations only that fairness, justice and that equality that it recognizes in the affairs of man to man. We are honored by the presence of many distinguished men, but I think foremost the architect of Law Day U.S.A., the Hon. Charles S. Rhyne, a former President of the American Bar Association. It was he who three years ago sounded the clarion call for the first Law Day. And he said then, 'these are the days of soul searching and re-evaluation of everything in our storehouse of strengths and weaknesses. There is need,' he continued, 'to hold fast to certain fundamental concepts . . . necessary to the preservation of individual freedom and free government . . . The rule of law is such an unshakeable concept.' In three short years he has seen his idea grow into one of the most impressive observances that American people hold today. Over 400 bar associations throughout the 50 states have arranged some 100,000 programs in schools, churches, court-

houses and public meeting places throughout our 50 states. All the way from Sheboygan to Balmorhea, millions of our fellow citizens will gather together today to re-dedicate their lives to the proposition that the rule of law is as essential to every day living as is food and drink and, as the keystone of peace and the keystone of order in our national and international life, it must have the respect as well as support of all men.

"In the selection of the day on which these concepts might be dramatically emphasized. Mr. Rhyne wisely selected the traditional May Day of the Soviets. Thus on this day the attention of the American people, as well as those people throughout the world, are focused in contrast on the Rule of Law in the land of the free as opposed to the Rule of Men in the land of the Communists. For the first time since we have been celebrating this day, Law Day falls on Sunday. This but pinpoints the faith of the rule of law that dignity and worth are given by God to all men and everything man does is under one judgment—the judgment of God. The anti-God doggerel of the Communists holds that dignity and worth rest only upon the fallibility of men and that there can be no judgment other than that of the Supreme Soviet. This violates not only the law of God but the basic truth of life that there can be no liberty without law for, as has been said, liberty would then be but license and law itself would be nothing but tyranny."



... Dr. Sizoo gave a new insight and inspired a deeper faith in the great historical Christian truths to everyone who was privileged to hear the profound message.'

Dr. Joseph R. Sizoo, the University's Milbank Professor of Religion and Director of Chapel, received this Declaration of Appreciation of his Good Friday message at the Pentagon. The presentation was made at the University's annual Awards Tea by Maj. Gen. C. K. Gailey, Commanding General, U.S. Army Military District of Washington. From left, Lieut. Col. Harmon D. Moore, Army Chaplain, Dr. Sizoo; Acting University President Oswald S. Coleclough, and General Gailey.



Senator Oren E. Long of Hawaii receives his certificate of membership in the University chapter of Phi Sigma Kappa, an honor conferred to recognize his service to education as Head of the Department of Public Instruction in Hawaii. Chapter officers from left: Charles King, Alan May, Bar Crivella.



Associate Director of the Federal Mediation and Conciliation Service Robert Harris Moore is shown after his initiation as associate member of the University chapter of Tau Kappa Epsilon with Chapter President Henry Engelbrecht and Mr. Moore's son, Jon, an active member of the chapter.

Brothers Clasp the Hands of Brothers

Photos Reni and Brian Mayberry

A four-way greeting on the steps of Sigma Nu between (from left) University Chapter President A. Jackson Lynn Jr.; University Alumnus Hillary A. Tolson, Assistant Director of National Park Service; Representative Howard H. Baker of Tennessee; and Alumni Chairman Phillip Taylor at Sigma Nu's Congressional reception.



Chairman of the University Board of Trustees Newell W. Ellison (left) and Dean of the University's National Law Center (right) congratulate Judge Walter K. Bastian, U.S. Court of Appeals for the District of Columbia Circuit, upon his election to honorary membership in the University chapter of Order of the Coif. Judge Bastian is a University Trustee.



FIELD TRIP U.S.A.

University officials conduct what amounts to any number of international field trips each year when groups representing foreign teaching programs and leadership, in industry and the professions are assigned to its Department of Business and Public Administration for periods ranging from a few days to a few months. Above Government employees from the Far and Middle

East, North Africa and the Caribbean visited sessions of the Supreme Court. They are shown with University Alumnus and Court Associate Librarian Charles Hallam (center). Below, Representative George McGovern of South Dakota visits with European professors of business education after his return from an International Agriculture Conference in Greece.



HUMRRO

Acting University President Oswald S. Colclough visited the Infantry Human Research Unit at Fort Benning, Ga., one of five field units directed by the University Human Resources Research office to conduct investigations into psychological aspects of combat and training under the Department of the Army contract.



President Colclough was greeted at Lawson Army Air Field by Dr. Preston S. Abbott, Director of psychological research conducted by the University at Fort Benning. University Dean of Sponsored Research Benjamin D. Van Evera climbs from the plane.

University officials visited General Freeman, second from left. From left, Dean Van Evera, Dr. Abbott, President Colclough,



President Colclough and Maj. Gen. Paul L. Freeman, Jr., Commanding General, at luncheon in honor of the President.

and Director of the University's Human Resources Research Office Meredith P. Crawford.





Major students met with faculty to discuss this program of studies informally. Dr. Thelma Hunt and Dean A. M. Woodruff of the School of Government review a course summary with Capt. Douglas E. Fox, Master of Arts candidate from the Student Detachment, Headquarters, Military District of Washington.

Personnel Administration



Master's candidate Byron Kennard, who is a Management Intern Scholar and a Program Analyst, Department of Health, Education, and Welfare, consults the catalog with Dr. Waldo Sommers and Dr. William G. Torpey.





Washington Artist Bertha Noves greets Major Theodore Greene at Rhode Island at the opening of her exhibit, "World Pictures," in the University Library. Miss Noves' crayon sketches have been made during her travels in all parts of the world.

Associate Dean of Faculties John F. Latimer represented the University at a meeting of civilian institutional representatives and Air Force ROTC officials at Maxwell Air Force Base, Ala.



First prize winner is a new alumnus and Junior Engineer with the Bureau of Naval Weapons at the Naval Ammunition Depot in Honolulu, Hawaii. Alexander Graps BLE '41 receives the American Institute of Engineering Education's District 2 scientific award from AIEE Vice President D.L. Greene for his paper on "Signal Flow Graphs."



Federalist Editor Leaves NIH

Jack E. Fletcher, who has represented the National Institutes of Health as Contributing Editor to the *University Federalist* since its founding seven years ago, has resigned from the Federal Service.

Mr. Fletcher left his position as Chief of the Office of Research Information and Staff Assistant to the Director of NIH, effective June 3, to become Director of Public Relations of the Merck Sharp & Dohme Division of Merck & Co., Inc., at West Point, Pa.

A graduate of Pennsylvania State University, Mr. Fletcher came to NIH in 1939 from Eddie Albert Productions, maker of educational motion pictures.

United States Inventions Lag Says Kettering Winner

The per capita output of inventions in the United States "seems to lie nearer the bottom than the top of the list of mature industrial countries," according to Frank A. Howard, President of the Sloan-Kettering Institute for Cancer Research.

Mr. Howard, in an address to the fourth annual public conference of The George Washington University's Patent, Trademark, and Copyright Foundation, quoted a statistical report which indicated that the United States ranks behind Switzerland, Sweden, Germany, and England in per capita output of inventions.

Mr. Howard, who has himself been granted over 90 patents and was for many years the President of the Standard Oil Development Company, spoke after having been presented the

Foundation's 1959 "Charles F. Kettering Award for Meritorious Work in Patent, Trademark, and Copyright Research and Education."

Emphasizing "three troublesome basic statistics," Mr. Howard stated. "First, our total national output of patented inventions has not increased substantially over a 40 year period of rapid technical progress. Second, our per capita output of such inventions is not high, as most of us have always assumed, but rather is in the low range of the industrial countries, and is in fact only a fraction of the per capita output of the countries which lead the world in this index of technical progress. Third, our per capita output has declined 38% over a long period, apparently much more than that of the other major industrialized countries."

Mr. Howard suggested that, rather than expend so much effort in searching for abuses in the patent system, "it would now be more in the national interest to concentrate, for a time at least, on trying to strengthen the incentive effect of the patent system."

The conference, which was held June 16 and 17, was attended by patent attorneys and others from all parts of the United States. Presentations included a discussion of research of the foundation and panel consideration of taxation, foreign licensing, antitrust decrees, executive decision-making, patent utilization, small business, and government patent policies.

Mr. Howard receives the Kettering Award from Acting President Oswald S. Colclough



FALL SEMESTER OFFERINGS

INAUGURATED this Fall, a Center of Behavioral Science will be established in the University's School of Government under the direction of newly appointed Professor Gordon L. Lippitt. The Center will undertake research and special projects in the behavioral science area, and Dr. Lippitt will offer courses in this field.

The Department of Business and Public Administration will offer courses in the Mechanics of Data Processing, Linear Programming, Introduction to Hospital Administration, and Studies in Hospital Management. The Mechanics of Data Processing will deal with the "hardware" used in the basic processing systems. Linear Programming will deal with the appli-

cation of a mathematical technique to planning for management. The graduate program in hospital administration, established last year at the University, offers Introduction to Hospital Administration, and Studies in Hospital Management as part of its continuing program.

The Department of Art is expanding its program to include offerings in archeology. Classical Archeology is the first course to be offered in this area. Also offered will be courses in Eighteenth Century Art in Europe, Advanced Design (at the Corcoran School), and a Seminar in American Art.

A new major in Russian is being offered for the first time this Fall by the University's Columbian College. The Russian language has been offered in the past at the University as a part of the School of Government's Soviet Orbit Regional Studies program and as a teaching field in the School of Education. The new liberal arts major will include courses in Russian language, Russian history, and Russian literature.

Dean Nutting Welcomed with Honor

Washington officials gathered with members of the scholarly community to welcome Dean Charles B. Nutting to the new post of Dean of the University's National Law Center. Secretary of Health, Education, and Welfare and University Alumnus Arthur S. Flemming (left) greets Dean Nutting. Three other alumni present were, from left, University Trustee Frank Weitzel, Assistant Comptroller General of the United States; Rear Admiral Chester Ward, Judge Advocate General of the Navy; and Oliver Gasch, United States Attorney for the District of Columbia.



A new course, *19th Century Russian Literature*, will be offered for the first time this Fall.

Graduate studies in the departments of Germanic Languages and Literatures and Romance Languages and Literatures will be greatly expanded next year, with both departments participating in the National Defense Fellowship Program. In the Fall Semester, these courses will be offered for the first time: *Gothic, German Classicism, German Romanticism, Problems of Teaching French Language and Literature in College, French Realism, and Naturalism, The Renaissance in Europe, Problems of Teaching Spanish Language and Literature in College, Works of Cervantes, Spanish Romanticism, Comparative Romance Languages and Literature, and Doctoral Seminars in French and Spanish*. A comparable number of new courses will be established in 1961-1962 and 1962-1963, with each course being repeated once every third year.

Twenty-three new fields of research have been established by the University's Graduate Council for working leading to the Ph.D. degree: *Social Themes in American Literature; Middle High German Language and Literature; Early New High German Language and Literature; Old High German Language and Literature; German Romanticism; Old Norse Language and Literature; Economic Policy; Methodology of Economics; Quantum Mechanics; Molecular Physics; Relativity; Low Energy Nuclear Physics; Embryology; Determinative Bacteriology; Immunity in Tuberculosis; Carbohydrate Metabolism; Metabolic Relationships of Insulin; Physiology of Vas-*

cular Plants; Plant Ecology; Insect Physiology; Abnormal Psychology; Comparative Psychology; and Experimental Psychology.

The University's English Department has abandoned its remedial course for those entering freshmen who are unprepared for the regular college freshman composition course. Instead, students who have deficiencies will be placed in a new course which will meet five hours a week instead of three and which will combine the regular freshman work with additional remedial work. The course will carry only the three hours credit for the regular first semester composition course, but an additional fee of \$25 will be charged. The English Department is also offering for the first time this fall an additional semester of English for Foreign Students, for those students who need additional work after having completed the semester course previously offered.

The Department of Civil Engineering will offer two new undergraduate courses, *Applied Earth Sciences* and *Engineering Planning and Organization*, and three new graduate courses, *Geotechnics in Soil Mechanics, Theoretical Soil Mechanics, and Space Structures*, this Fall. The graduate program in Engineering Science will include one new course this Fall, *Mechanics of Orbits and Trajectories*.

The newly-created Institute of Forensic Medicine at the University will offer its first graduate course, *Forensic Medicine*, this Fall.

Work leading toward the degree of Bachelor of Science in Pharmacy in the University's School of Pharmacy will take five years instead of four beginning with the Fall Semester. A

number of the School's courses have been expanded and changed from the freshman-sophomore level to the upper-class level. Two new courses have been added to the curriculum: *First Aid* and *Physical Pharmacy*. Pharmacy students will henceforth have more elective courses in their program of studies.

The Department of Geology will offer two new courses this Fall: *Vertebrate Paleontology* and *World Regional Geology*.

The Department of History will offer two new courses this Fall: *History of Germany* and *Readings in American Political and Constitutional History*. In addition, the department's offering in Russian History will be expanded from a one-year course to two one-year courses.

The Department of Mathematics will offer a new course, *Introduction to Abstract Algebra*, for the first time this Fall. In addition, both the undergraduate course and graduate courses in mathematical logic have been expanded from one-semester to two-semester offerings.

The Department of Philosophy will offer two new courses this Fall: *Philosophic Problems in Living Issues* and *The Philosophy of Science*.

A new undergraduate course, *History of Judaism to the Talmud*, will be offered this Fall by the Department of Religion. The Department will also offer for the first time a graduate course, *Readings and Research*.

The Department of Political Science is increasing its offerings in the area of domestic politics. Two new graduate courses will be offered this Fall: *Seminar: The Constitution of the*

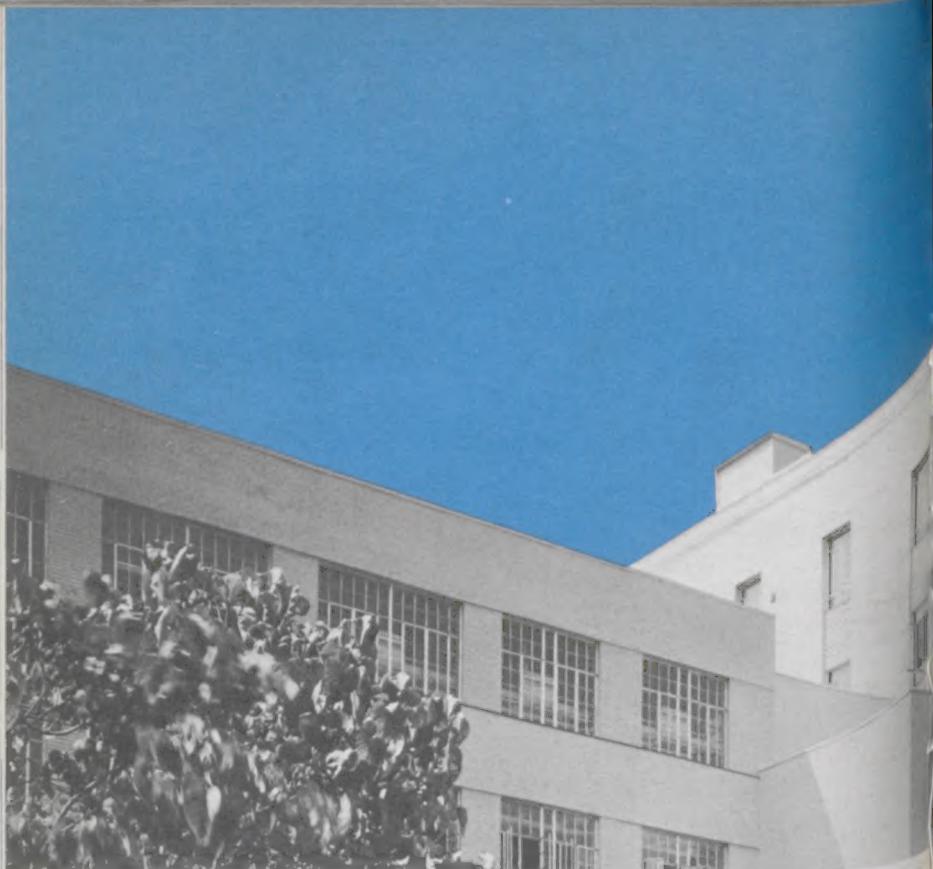
Registration

Registration for the 1960 Fall Semester will be held Thursday through Saturday, September 22 through 24, from 10 a.m. to 8 p.m. on the 22nd and 23rd, and 10 a.m. to 1 p.m. on September 24. Law School registration will take place in Stockton Hall, 720 20th Street, N.W. Other students will register in Building C, 2029 G Street, N.W., with the exception of graduate students in the School of Engineering, who will register in advance on Tuesday and Wednesday, September 20 and 21, from 11 a.m. to 8 p.m. in Tompkins Hall of Engineering, 725-23rd Street, N.W. Classes in all divisions will begin September 26.

Students not registered during the Spring Semester must submit an application for admission or re-admission to the Director of Admissions, 2029 G Street, N.W.

United States, and The American Political Process: Political Parties and Interest Groups.

Other new courses this Fall will be *Applied Anthropology* in the Department of Sociology and Anthropology; *Speech Science* in the Department of Speech; *Mathematical Probability and Applications* in the Department of Statistics; *Fabric Decoration* in the Department of Home Economics; and *Isotopes* in the Department of Biochemistry.



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